

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Sandra M. Cooke

GENERAL INFORMATION:

Name:	Osram Sylvania Products Inc.
Address:	P.O. Box 900, Tyrone Pike, Versailles, KY 40383
Date application received:	December 15, 1997
SIC/Source description:	3641, Lamp Manufacturing Facility
Source ID #:	21-239-00013
Source A.I. #:	34770
Activity #:	APE20060001
Permit number:	VS-06-002

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
__Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input type="checkbox"/> NSPS	<input type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input checked="" type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☐ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☒ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Potential Lbs/Hour Additional	Potential Tons/Year Additional
PM ₁₀	1.7552	7.7148
SO ₂	9.97E-01	4.3676
NO _x	1.00E+00	4.3822
CO	9.41E-01	4.1225
VOC	4.18E+00	18.2947
Acetic Acid	1.91E+00	8.3815
Ammonia	4.95E+00	21.6967
Amyl Acetate	1.28E-01	5.62E-01
Diacetone Alcohol	1.28E-03	5.63E-03
Dimethyl Urea	2.78E-01	1.2174
*Ethylene Oxide	9.35E-04	4.09E-03
*Formaldehyde	1.04E-03	4.57E-03
H ₂ SO ₄	6.97E-02	3.05E-01
IPA	9.30E-02	4.07E-01
*Lead	3.10E-08	1.36E-07
*Hg (Mercury)	5.78E-03	2.53E-02
Monoethylamine	4.67E-03	2.05E-02
Monomethylol Urea	6.95E-02	3.04E-01
Tertiary Butanol	1.28E-03	5.63E-03
Trioxane	3.54E+00	15.4929

* Bold typeface indicates a Hazardous Air Pollutant (HAP)

SOURCE DESCRIPTION:

Osram-Sylvania has applied to add a ninth lamp manufacturing line to its facility in Versailles, Kentucky. This line, designated by the plant as Line 44, will operate using the following process. Fluorescent lamps are coated on the inside with a fluorescent phosphor prior to drying in a tunnel. After coating and drying, each lamp is etched with ink, dried in the marking oven and brushed to remove loose coating material. The bulb is then baked to solidify coating in a uniform manner. The bulb is then exhausted, filled with a precise amount of mercury and sealed. Caps and wires are placed on the tubes before a base is permanently cemented in place and an insulating silicone-based solution is applied to the outer surface of the tube. Finally, the lamps are unloaded, checked, and packaged.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

- Pursuant to Regulations 401 KAR 63:020 and 401 KAR 63:021, Mercury emissions shall not exceed 0.21 lb/hr source-wide.

- b. Pursuant to Regulations 401 KAR 63:020 and 401 KAR 63:021, Lead emissions shall not exceed 0.23 lb/hr source-wide.
- c. Opacity and hourly particulate emissions caps are established for each operating production line or process area under regulations 401 KAR 59:010, New process operations

OPERATIONAL FLEXIBILITY:

None